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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/394,096	09/13/1999	PAUL JOSEPH DAVIS	DAVIS6-9-5	3701

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EXAMINER	
SING, SIMON P	

ART UNIT	PAPER NUMBER
2645	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/394,096	DAVIS ET AL.	
	Examiner	Art Unit	
	Simon Sing	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-15, 17, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li US 5,646,990 in view of Sacca US 5,692,042 and further in view of Chamberlin et al. US 4,817,127.

1.1 Regarding claim 1, Li discloses a full-duplex speakerphone in figures 1 and 2 (column 4, lines 62-67; column 5, lines 1-20; column 6, lines 11-28), comprising:

a receive signal from a telephone line (column 6, lines 36-40);

gain modules 268 and 246 (figure 2); and

a summer 260 (figure 2).

Li fails to teach injecting a massage playback signal into the speakerphone, and a recording module for recording a telephone conversation from telephone line 274 (telephone lime 274 inherently has a receiving path and a transmitting path).

However, Sacca discloses a voice messaging system with speakerphone capability in figure 1 (column 7, lines 23-51). Sacca teaches injecting a tape playback message via switch 118 into a receiving path at the input of speaker amplifier 120, and

then to a transmitting path at the input of line amplifier 142 for transmitting to a far end party in a speakerphone mode (column 8, lines 7-14, 26-53).

In addition, Chamberlin discloses a modular telephone system in figures 4 and 6. Chamberlin teaches combining a speakerphone 18 (column 13, lines 29-31) with two recording/playback modules 12 and 14, one for recording a telephone conversation and one for playing an outgoing announcement (column 22, lines 38-43). Chamberlin further teaches independent operations of the speakerphone 18 and each recording/playback module (column 16, lines 19-43), or as a telephone answering device (column 21, lines 27-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li's reference with the teaching of Sacca and Chamberlin, so that the speakerphone of Li would have been connected to a recording device for recording a telephone conversation, and a tape playback module, such as a telephone answering device, for pre-recording a message, and summing said pre-recorded message at a summer at the input of speaker amplifier 234 and at another summer at the input of line amplifier 270 of a transmitting path, so that a far end party would have been able to converse with a near end party and to hear the playback message at the same time, such a modification would have enabled a near end user to play a pre-record a message to a far end party during a telephone conversation, and also would have enabled the near end party to record a telephone conversation.

1.2 Regarding claim 2, Li teaches a volume control 226 (figure 2; column 6, lines 62-67).

1.3 Regarding claim 3, Li teaches an echo canceller 254 and the playback message is injected at the input of speaker amplifier 232 (after echo canceller 254).

1.4 Regarding claim 4, it is inherent that a recording/playback module, such as the recording/playback module of Chamberlin, has an amplifier in its signal output path.

1.5 Regarding claim 5, Li teaches a fixed gain amplifier 268 and an automatic gain control (AGC) 246 in a receiving path, and it is a matter of design choice to have two amplifiers, a fixed gain and a variable gain, instead of one.

1.6 Regarding claim 6, Li teaches a fixed gain amplifier 268 and an automatic gain control (AGC) 246 (figure 2).

1.7 Regarding claim 7, Li teaches that the volume control 226 is after AGC 246 (figure 2).

1.8 Regarding claim 8, Li teaches a D/A 230 after echo canceller 254 (figure 2).

1.9 Regarding claim 9, Li teaches a Rx speech detector 252 (figure 2; column 6, lines 11-15).

1.10 Regarding claim 10, as discussed in claim 1, the recording module is a telephone answering device (Chamberlin, column 21, lines 27-36).

1.11 Regarding claim 11, a telephone conversation recorder (recording module) inherently records a receiving signal and a transmitting signal, and the telephone recorder inherently has line-in amplifiers, such an amplifier 268 of Li, to raise the signal level suitable to recording.

1.12 Regarding claims 12 and 13, Li teaches fixed amplifier 268 and AGC amplifier 246 of a receiving path (input line).

1.13 Regarding claims 14, 15 and 22, Li discloses a full-duplex speakerphone in figures 1 and 2 (column 4, lines 62-67; column 5, lines 1-20; column 6, lines 11-28). Li teaches echo canceling a transmit signal from a receive signal at a summer 260 in a receiver path (figure 2; column 7, lines 21-31), but fails to teach recording a telephone conversation from telephone line 274, and injecting a message playback signal into the speakerphone so that a far end user can listen to the playback signal and talk at the same time.

However, Sacca discloses a voice messaging system with speakerphone capability in figure 1 (column 7, lines 23-51). Sacca teaches injecting a tape playback message, from a telephone answering device, via switch 118 into a receiving path at the input of speaker amplifier 120, and then to a transmitting path at the input of line amplifier 142 for transmitting to a far end party in a speakerphone mode (column 8, lines 7-14, 26-53).

In addition, Chamberlin discloses a modular telephone system in figures 4 and 6. Chamberlin teaches combining a speakerphone 18 (column 13, lines 29-31) with two recording/playback modules 12 and 14, one for recording a telephone conversation and one for playing an outgoing announcement (column 22, lines 38-43). Chamberlin further teaches independent operations of the speakerphone 18 and each recording/playback module (column 16, lines 19-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li's reference with the teaching of Sacca and Chamberlin, so that the speakerphone of Li would have been connected to a recording device for recording a telephone conversation, and a tape playback module for playing back a pre-recorded message which would have been injected into a summer at the input of speaker amplifier 234 and into another summer at the input of line amplifier 270 of a transmitting path, so that a far end party and a near end party would have been able to converse and to hear the playback message at the same time, such a modification would have enabled a near end user to play a pre-recorded message to the

far end party during a telephone conversation and to record the telephone conversation at the same time.

1.14 Regarding claims 17 and 20, as discussed in claim 1, the recording module is a telephone answering device (Chamberlin, column 21, lines 27-36).

2. Claims 16, 18, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li US 5,646,990 in view of Sacca US 5,692,042.

2.1 Regarding claims 16 and 19, Li teaches a full-duplex speakerphone in figures 1 and 2 (column 4, lines 62-67; column 5, lines 1-20; column 6, lines 11-28), but fails to teach injecting a message playback signal into the speakerphone so that a far end user can listen to the playback signal and to talk at the same time.

However, Sacca discloses a voice messaging system with speakerphone capability in figure 1 (column 7, lines 23-51). Sacca teaches injecting a tape playback message, from a telephone answering device, via switch 118 into a receiving path at the input of speaker amplifier 120, and then to a transmitting path at the input of line amplifier 142 for transmitting to a far end party in a speakerphone mode (column 8, lines 7-14, 26-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li's reference with the teaching of Sacca and

Chamberlin, so that the speakerphone of Li would have been connected to a tape playback module for playing back a pre-recorded message which would have been injected into a summer at the input of speaker amplifier 234 and into another summer at the input of line amplifier 270 of a transmitting path, so that a far end party and a near end party would have been able to converse and to hear the pre-recorded message at the same time, such a modification would have enabled a near end user to play a pre-recorded message to the far end party during a telephone conversation.

2.2 Regarding claims 18 and 21, Li teaches a digital speakerphone in figure 2. The digital speakerphone comprises analog to digital converters (A/D) 212 and 262, and digital to analog converters (D/A) 256 and 230. It is inherent that the playback message injected into the digital speakerphone can be either analog or digital, depends on the point of injection. For analog signals, injection (summing) point will be at the input of amplifiers 270 and 234 and as for analog signals, injection (summing) point will be at the input of D/A 256 and 230.

Response to Arguments

3. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Sing whose telephone number is (703) 305-3221. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached at (703) 305-4895. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

S. Sing

03/04/2005

FAN TSANG
SUPERVISORY PATENT EXAMINER
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